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Regional Director
Bureau of Indian Affairs
Southwest Regional Office
P.O. Box 26567
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Dear Sir:

On June 28, David Conklin of our staff met with John Waconda (Southwest Regional Office) and Steve Thomas (Jicarilla Agency) to evaluate a proposed FY 2005 dwarf mistletoe control/thinning project on the Jicarilla Apache Indian Reservation. This letter describes the project area and proposed treatment, and summarizes observations made in some recently treated areas at Jicarilla.

The FY 2005 project site is on Pounds Mesa, located in the eastern portion of the Reservation. A large commercial timber sale was conducted on Pounds Mesa in 1997 and 1998. Beginning in FY 2002, a series of follow-up treatments have been implemented in several of the cutting units to remove excess and diseased trees in the smaller size classes. To date, about 530 acres of this sale area have been treated using Forest Health Prevention/Suppression funds. The proposed FY 2005 project would treat two additional units, Unit 5 (143 acres) and Unit 6B (59 acres). Excluding understocked portions of Unit 5, the total area proposed for treatment is 168 acres.



Similar to recently treated areas on Pounds Mesa, the proposed units are predominantly ponderosa pine, with minor amounts of Douglas-fir and occasional white fir. Stocking is highly variable, but averages around 250 trees/acre. Pine dwarf mistletoe (*Arceuthobium vaginatum* subsp. *cryptopodum*) is patchy in distribution and of moderate intensity overall. The sale removed most mistletoe-infected trees of commercial size. Post-sale inventories indicate an infection rate of about 40 percent in the smaller size classes.

Recently completed FY 04 project area on Pounds Mesa.



The proposal calls for thinning to an average spacing of 20 to 22 feet (90 to 100 trees/acre). Most visibly infected trees would be cut, although some lightly infected trees of good form and vigor would probably be retained to supplement stocking. We recommend cutting all visibly infected trees less than 5" dbh, since few of these will grow to sawtimber size. Overall, the Tribal crew has done a good job selecting quality "leave trees" in recent projects on Pounds Mesa.

We did observe one area (roughly two to three acres in size) within the recently completed FY 2004 project area where it appeared that the mistletoe was too severe for successful treatment. Retention of lightly infected dominant and codominant trees can be a good strategy where infection is relatively light and the majority of crop trees are disease-free. This becomes problematic where infection is more extensive and most of the potential crop trees are infected.

Dense pole-size groups with extensive infection are especially difficult to treat because, in their often stagnant condition, they harbor an abundance of latent infection. Following thinning, the remaining mistletoe is stimulated and can intensify rapidly on the leave trees. From a practical standpoint, deferring such areas may be preferable to thinning them (and generating large volumes of additional slash). Prescribed fire is another option for managing such areas.

Despite the implementation of spring (May and June) thinnings for several consecutive years on Pounds Mesa, relatively little residual tree mortality from *Ips* engraver beetles (which breed in fresh pine slash) has been observed in the project areas. Continued monitoring of *Ips* activity is recommended on Pounds Mesa and other thinning areas at Jicarilla.

The proposed FY 2005 project should improve overall forest conditions and increase growth on selected crop trees. We again commend the Jicarilla Agency and the Jicarilla Tribe for their excellent project proposal and continued commitment to forest health.

Sincerely,

/s/ Debra Allen-Reid
DEBRA ALLEN-REID
New Mexico Zone Leader,
Forest Health

cc: Leonard Lucero, John Anhold
John Waconda, Southwest Regional Office, BIA
Steve Thomas, Jicarilla Agency, BIA